

Claim Amendments:

1. (Currently amended) A network interface device connected to building wiring, the building wiring comprising a point of entry and a plurality of branches connected to terminal devices, for creating a signal distribution system comprising

a first port connected to the point of entry side of a branch of the building wiring;

a second port connected to the terminal device side of a branch of the building wiring; and

a signal reflecting circuit connected between the first and second port;

wherein a signal received at the second port is reflected out the second port and wherein all terminal devices connected to the network interface device receive the reflected signal.

2. (Original) The network interface device of claim 1, wherein the signal reflecting circuit comprises a parallel resonant circuit.

3. (Original) The network interface device of claim 1, wherein the signal reflecting circuit comprises a series resonant circuit.

4. (Original) The network interface device of claim 1, wherein the signal reflecting circuit comprises

a splitter/combiner with a first tap port, a second tap port and a common port, wherein the power at the first and second tap ports is coupled bi-directionally to the common port;

the common port connected to a branch of building wiring;

a first filter for separating bands of frequencies connected to the first tap port;

means for reflecting signal energy connected to the first filter; and

a second filter for separating band of frequencies connected between the second tap port and the point of entry.

5. (Currently amended) A signal distribution network for transmitting modulated signals using building wiring containing a plurality of branches comprising

a network interface device that reflects network signals originating in the building wiring back into all branches of the building wiring;

at least one signal splitter; and

a plurality of terminal devices.

6. (Original) The signal distribution network of claim 5, wherein the signal modulation is orthogonal frequency division multiplexing.

7. (Original) The signal distribution network of claim 5, wherein the building wiring is coaxial cable.

8. (Original) The signal distribution network of claim 5, wherein the network interface device is located at the point of entry of the building wiring.

9. (Previously presented) The signal distribution network of claim 5, wherein the network interface device is frequency dependent and reflects signals by reflecting a predetermined frequency band of signals.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Previously presented) The signal distribution network of claim 5, wherein the signal modulation is code division multiplex.

18. (Previously presented) The signal distribution network of claim 6, further comprising a method of sharing the communication medium between terminal devices using time division duplex protocol.

19. (New) The network interface device of claim 1 wherein the signal reflecting circuit comprises an impedance mismatch.

20. (New) The network interface device of claim 4 wherein the means for reflecting signal energy produces an impedance mismatch.

21. (New) The signal distribution network of claim 5, wherein the network interface device uses an impedance mismatch to reflect the network signals.

22. (New) A network interface device connected to building wiring, the building wiring comprising a point of entry and a plurality of branches connected to terminal devices, for creating a signal distribution system consisting of

a first port connected to the point of entry side of a branch of the building wiring;

a second port connected to the terminal device side of a branch of the building wiring; and

a signal reflecting circuit connected between the first and second port;

wherein a signal received at the second port is reflected out the second port.

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Examiner/Art Unit Chowdhury/2611

Drawing Amendments

Replacement drawing sheets for figures 1 to 5 (all figures) are attached. These formal drawings replace previously filed informal drawings.